AUTO INSTRUMENTS

Electromagnetic Flow Meter

GENERAL

ATWFD Series is a flange type electromagnetic flowmeter ideal for conductive liquids. It comes in sizes from 10A to 2000mm. ATWFD is widely used for tap-water, waste water, food & beverage pulp &paper and many other industrial fluid.

ATWFD Series electromagnetic flowmeter could be used in compact or separate model with AMC Series converter of electromagnetic flowmeter.

FEATURES

- Various liner and electrode satisfy most industrial applications
- Flow Velocity range: 0-12 m/s, precise in low flow applications
- It comes any flanges such as, ANSI, DIN, JIS... etc
- Excellent for high pressure application
- Protection class: IP68 available; sensor submersible
- FEP Liner is suitable for vacuum tube
- High accuracy of +/-0.4% value of reading (or +/-0.2% value of reading)
- With Forward/Reverse flowrate measurement function
- It has electrode cleaning function

STANDARD SPECIFICATION

- Size : 10A,10,15,20, 25,32,40,50,65,80,100,125
  150,200,250,300,350,400,450,500,600
  700,800,900,1000,1200,1400,1600
  1800,2000 mm
- Measuring Range : Velocity 0 - 0.25 m/s min.
  0 - 12 m/s max.
- Material
  - Measuring Tube : Stainless Steel 304
  - Flange : Carbon Steel (Standard)
  - : Stainless Steel 304 (Option)
  - : Stainless Steel 316, 316L (Option)
  - Coil Housing : Carbon Steel (Standard)
  - : Stainless Steel 304 (Option)
  - : Stainless Steel 316,316L (Option)
- Liner :Rubber
  :F46
  :PTFE
  :PFA
- Protection Class : Junction box IP67, Body IP68
  : IP 68 (Submersible)
- Conductivity : More than 5 uS/cm
- Explosion Proof : Exd(ib)ibqIIBT5
  (with AMC3100/AMC3200 only)
- Cable Entry Standard :M20X1.5 Option:1/2"NPTF

- Electrode & Grounding : Stainless Steel 316L
  : Hastelloy B
  : Hastelloy C
  : Titanium
  : Tantalum
  : Platinum
  : Tungsten Carbide
- Grounding Electrode : DN10A/10: use Grounding Ring *1pc
  : DN15-2000: 3 Electrodes
- Process Connection : Flange
- Flange Type : JIS 10K / JIS 20K / JIS 40K
  ANSI 150# / ANSI 300# / ANSI 600#
  DIN PN 10 / PN 16 / PN25 / PN 40
- Grounding Resistance : Must be less than 10 W
- Accuracy : +/-0.5% of reading (Velocity≥0.5 m/s)
  : +/-0.0025 m/s (Velocity < 0.5 m/s)
  : +/-0.2% of reading
- Temperature :-10 ~ +60 °C(Rubber)
  : -40 ~ +120 °C(PTFE 3/8"to 10")
- Ambient Temperature : -25 to +60 °C
- Max. Pressure : 350 Kg/cm2

CE

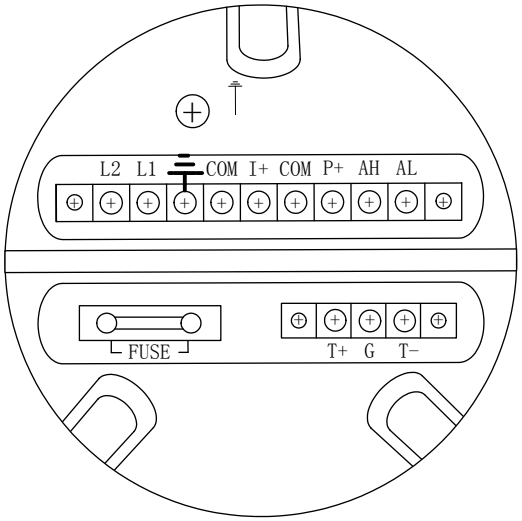
KAS CONTROL

Tel. 02-045-4155
www.kascontrol.co.th
sales.kascontrol@gmail.com

FLOW RANGE

Diameter (mm)	inch	Min flow m3/h	Normal flow rate m3/h		Max flow m3/h
15	1/2 ”	0.06	0.19	3.18	6.36
20	3/4 “	0.11	0.33	5.65	11.31
25	1”	0.17	0.53	8.83	17.67
32	1-1/4”	0.28	0.86	14.47	28.94
40	1-1/2”	0.45	1.35	22.61	45.23
50	2	0.71	2.12	35.35	70.68
65	2-1/2”	1.19	3.58	59.72	119.45
80	3”	1.81	5.42	90.47	180.95
100	4”	2.82	8.48	141.37	282.74
125	5”	4.41	13.25	220.85	441.71
150	6”	6.36	19.08	318.08	636.17
200	8”	11.31	33.92	565.48	1130.97
250	10”	17.67	53.01	883.57	1767.14
300	12”	25.44	76.34	1272.34	2544.69
350	14”	34.63	103.91	1731.8	3463.6
400	16”	45.23	135.71	2261.94	4523.89
450	18”	57.25	171.76	2862.77	5725.55
500	20”	70.68	212.05	3534.29	7068.58
600	24”	101.78	305.36	5089.38	10178.76
700	28”	138.54	415.63	6927.21	13854.42
800	32”	180.95	542.86	9047.78	18095.57

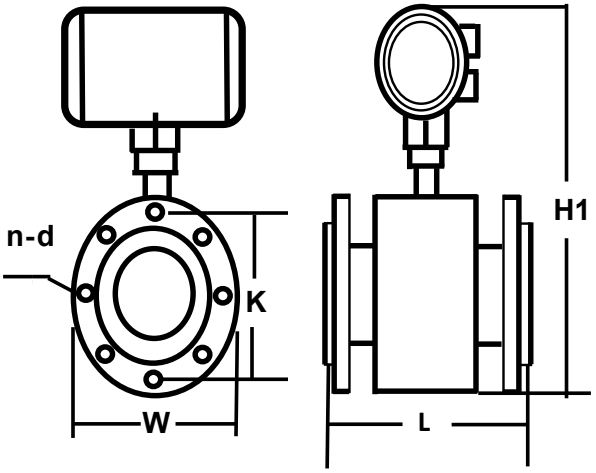
WIRING DIAGRAM



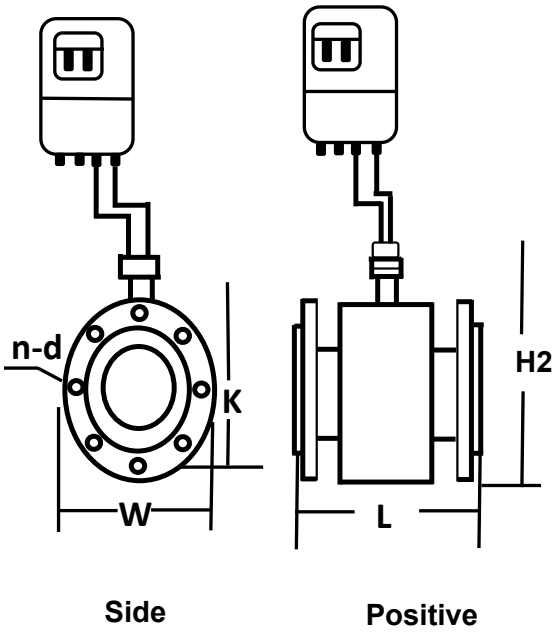
Symbols and Description of Connectors in Circinal Panel

I+:	Output Current for Flow Measurement
COM:	Output Current (Ground) for Flow Measurement
P+:	Frequency(Pulse) Output for Bi-directional Flow
COM:	Frequency (Pulse) Output (Ground)
AL:	Alarm Output for Low Limit
AH:	Alarm Output for Upper Limit
COM:	Alarm Output (Ground)
FUSE:	Fuse for Power Supply
T＋:	+Communication Input Signal(RS485-A)
T－:	-Communication Input Signal(RS485-B)
G	RS232 Communication Ground
L1:	220V（24V）Power Supply
L2:	220V（24V）Power Supply

DIMENSIONS



integral electromagnetic flow Meter



Split electromagnetic flow Meter

Nominal Diameter (DN)	L	H 1/H2 (Reference)	W	K	n-d	Kg (Reference)
15	200	275/240	95	65	14-4	9
20	200	285/250	105	75	14-4	9.5
25	200	295/260	115	85	14-4	10
32	200	315/280	135	100	18-4	11
40	200	325/290	145	110	18-4	12
50	200	340/305	160	125	18-4	14
65	250	360/325	180	145	18-4	15
80	250	375/340	195	160	18-8	16
100	250	395/360	215	180	18-8	19
125	250	425/390	245	210	18-8	23
150	300	460/425	280	240	23-8	27
200	350	515/480	335	295	23-12	45
250	450	585/550	405	355	25-12	67
300	500	640/605	460	410	25-12	77
350	550	680/645	500	460	23-16	92
400	600	745/710	565	515	25-16	104
450	600	795/760	615	565	25-20	120
500	600	850/815	670	620	25-20	135
600	600	960/925	780	725	30-20	150
700	700	1075/1040	895	840	30-24	220
800	800	1190/11500	1010	950	34-24	280
900	900	1290/1255	1110	1050	34-28	310
1000	1000	1400/1365	1220	1160	34-28	360
1200	1200	1585/1550	1405	1340	33-32	550
1400	1400	1810//1775	1630	1560	36-36	700
1600	1600	2010/1975	1830	1760	36 -40	850
1800	1800	2225/2190	2045	1970	39-44	1000

MODEL SELECTION GUIDE

Model Selection Guidance

Model	Suffic code								Description	
ATWFD	1	2	3	4	5	6	7	8	Electromagnetic flow meter	
Diameter	XX								Standard for diameter 0006:DN6;0015: DN15 0100:DN100;2200:DN2200	
Structure		S							Integrated type with LCD display	
		L							Remote type with 10 meter cable	
Electrode material			M						Ss316	
			T						Titanium	
			D						Tantalum	
			H						Hastelloy Alloy C	
			P						Plstinum-Iridium	
Signal output				0					No output	
				1					4-20mA/Pulse	
Liner material					X				Rubber	
					P				Propylene Oxide	
					F				PTFE	
					A				PFA	
Power supply						0			110-240VAC	
						1			24VDC(20-36VDC)	
						2			Battery power supply	
communication							0		NO communication	
							1		Modbus RS485	
							2		Hart	
							3		GPRS	
connection								DXX	D16 DIN PN16 Flange, D25 DIN PN25 Flange.....	
								AXX	A15 ANSI150#Flange A30 ANSI300#Flange.....	
								JXX	J10 JIS 10K Flange J20 JIS 20K Flange.....	
								XXX	Other request	
Body material									CS	Carbon steel
									S4	Stainless steel 304